NETWARS WIPT

ICD & MDG Improvement

V & V Template

July 20, 2005

Agenda

- A&S WIPT Background Regarding ICD & MDG
- Proposal for Documentation Improvement
  - Interface Control Documentation (ICD)
    - Identify the 2005_1 mission scope of the ICD
    - Q&A: What should be the scope of the 2005_2 ICD ?
  - Model Development Guide (MDG)
    - Identify the proposed content organization strategy
    - Identify options for increased usability and document maintenance
- Community Review of the V&V Template Content

A&S WIPT Background

- **ICD and MDG documentation lifecycle issues are to be vetted in the A&S WIPT**
- **Recommendations are captured and made aware to the NETWARS PM via community feedback and WIPT summary highlights which are posted in the NETWARS user forums**
- **2005_1 MDG improvement updated content and pruned stale content**

Proposed Improvement (ICD)

- **Support the new ICD mission:**
  - **Propose section updates and deprecation**
  - **XML based topological exports, XML based traffic exports**
- **A better method of presenting XML Schema:**
  - **Schema are diagrams of requirements**
  - **Easy to digest and understand schema visualization**
  - **Human Interpretable Information**
  - **Computer generated reports on schema validation.**

Ref #	ICD Sections	Update	Depricate
1000	Purpose of the NETWARS XML Schema	√	
1001	Implications for Developers	√	
1002	Overview of the Schema	√	
1005	**Appendix C: Generic Data File Formats**	√	
1007	**Appendix E: Attribute and Link Specification Files**	√	
1008	**Appendix F: NETWARS XML Schema**	√	
1016	Documentation of the Current Schema	√	
1017	**Appendix G: NETWARS Library Additions**	√	
1018	Naming Conventions	√	
1019	Organizations Naming Convention	√	
1020	OPFACs Naming Convention	√	
1022	Device Models Naming Convention	√	
1023	Scenarios Naming Convention	√	
1029	Table ORG_TY (ORGANIZATION-TYPE)	√	

Ref #	ICD Sections	Update	Depricate
1003	**Appendix A: File Formats for Statistics Collection**		√
1004	**Appendix B: SDF Format**		√
1006	**Appendix D: Simulation Related Files**		√
1009	Changes made to the Schema in 2004-1		√
1010	Changes that Affect Content and Validation		√
1011	Changes that Do Not Affect Content or Validation		√
1012	Changes made to the Schema in 2003-2		√
1013	Differences between the 2002-2.2 and 2003-1 Schemas		√
1014	Changes to 2002-2.2		√
1015	Differences from 2002-2.2 to 2003-1		√
1021	IERs Naming Convention		√
1025	Non-CADM Fields		√
1026	Table IER (INFORMATION-EXCHANGE-REQUIREMENT)		√
1027	Table IER_ELEMENT (INFORMATION-EXCHANGE-REQUIREMENT-ELEMENT)		√
1028	Table IER_ELEMENT_PROD (INFORMATION-EXCHANGE-REQUIREMENT-ELEMENT-PRODUCT)		√

Scope for the 2005_2 ICD

- **Identify the use cases for the ICD**
- **Identify the content that should be managed by this ICD**

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1005	**Appendix C: Generic Data File Formats**	√	
1007	**Appendix E: Attribute and Link Specification Files**	√	
1008	**Appendix F: NETWARS XML Schema**	√	
1016	Documentation of the Current Schema	√	
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MDG Improvement

- **Axioms:**
  - **The documentation concepts, content, and coverage will be maintained**
  - **The documentation will be easy to digest, cognitively.**
  - **Reduce maintenance**
- **Option #1 (Status Quo)**
  - **Content scrubbed/cleansed (P1)**
  - **Content reorganization (P2)**
- **Option #2**
  - **Modularized media format**
- **Option #3(Hybrid)**
  - **Meta-Data repository**
  - **Highly maintainable**

Codifies the previously identified use cases:

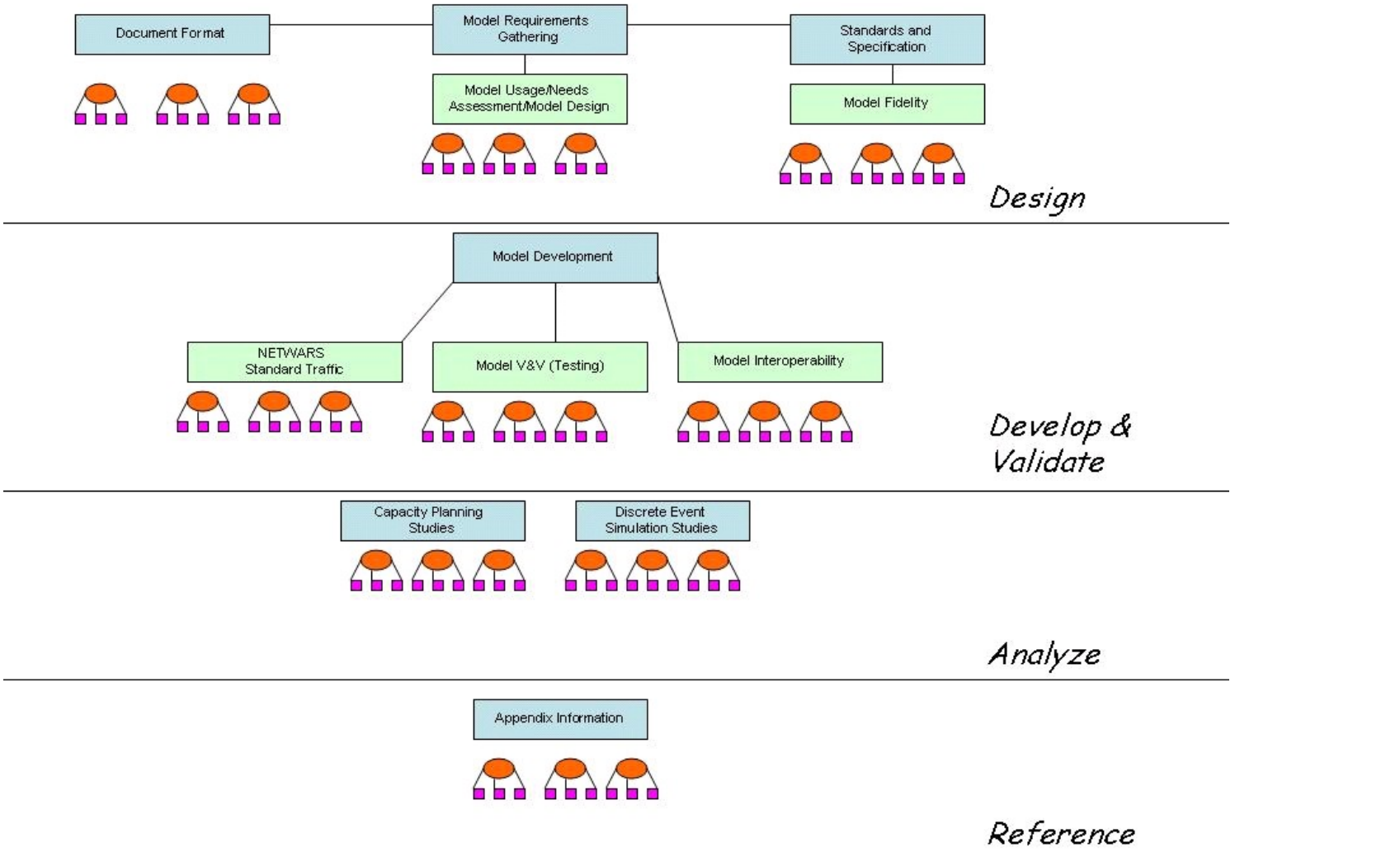
1. Users create model designs
2. Users develop and validate models
3. Users perform analysis studies with models

Presents media in a digestible format:

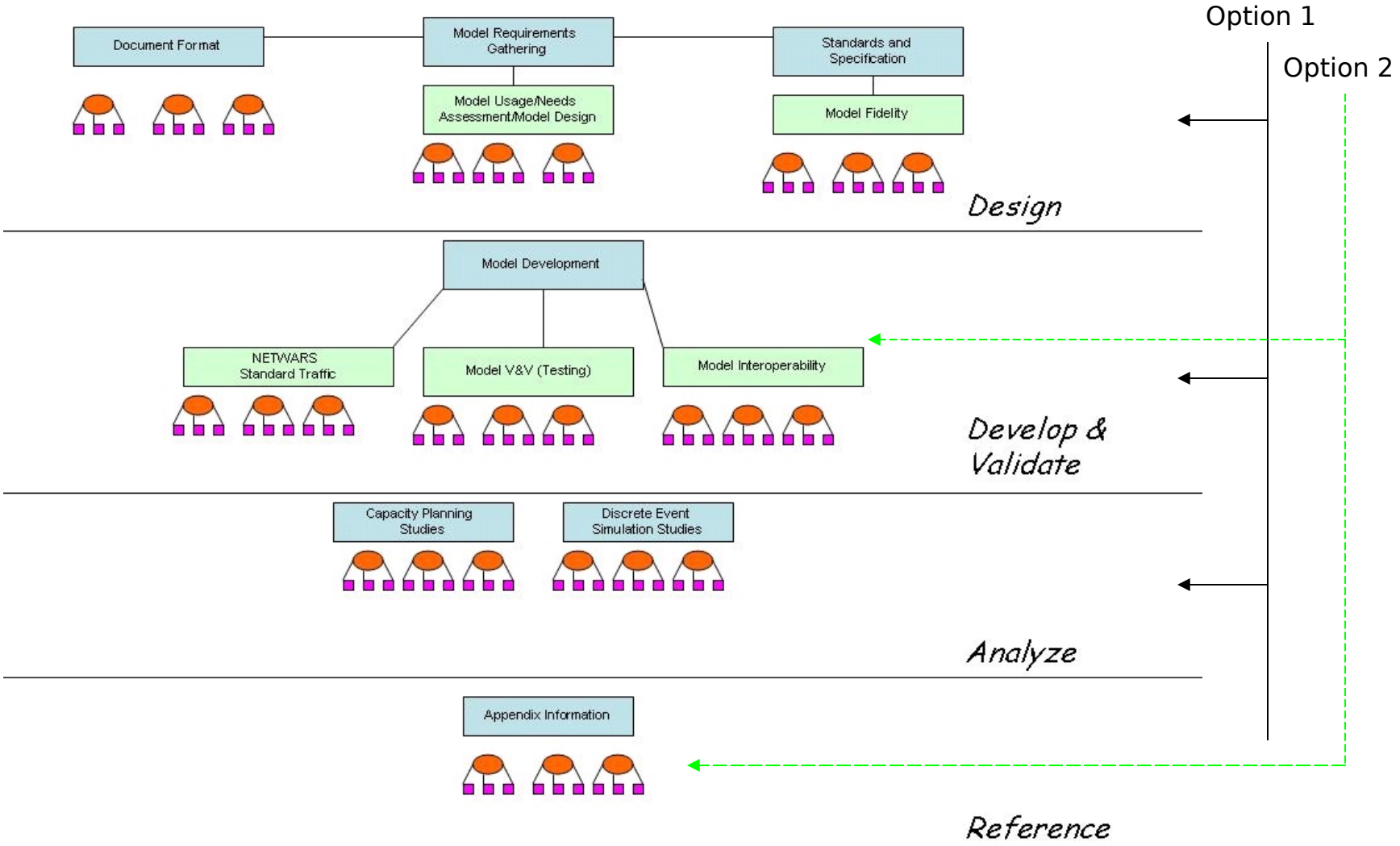
1. Improves readability via modules
2. Focuses user resources, printing, reading comprehension, and content searching

Focuses on document life cycle concerns

MDG Content Reorganization



Proposed Improvement Options



V&V Template Content

- **Packet Switched Systems (Note: This describes the model family**
- **System Description (Note: Identify the overall system description for the device being used)**
- **Model Description (Note: Identify the NETWARS features a that were developed into this model).**
- **Attributes (Note: Use a Table to Identify the Name, Type, and Description)**
- **Interfaces (Note: Use a table to Identify the interface, supported link types, and supported link speeds)**
- **Structure (Note: Present a graphical depiction of the model showing the implemented process models and interfaces).**
- **Statistics Generation and Collection (Note: Identify the statistic, Description, and Collection Mode)**

V&V Template Content

- Statistics Generation and Collection (Note: Identify the statistic, description, and collection mode)
- Static Test Results (Note: Use a table to depict model tested, total tests, passed, warning, failure)
- Dynamic Test Results (Note: Use a table to depict model tested, device classification, traffic type, status)
- Model Validation (Note : Identify the various model capabilities / stake holder requirements and how the model Performed)
  - Identify the accuracy of the model developed as well as the precision according to the fidelity of the design
  - Identify any model limitations
- Provide a summary of the model test results